CLAIM SUMMARY DOCUMENT

Claims 1-44 (Canceled)

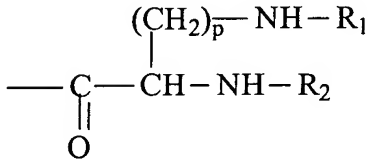
Claim 45 (Currently Amended) A pharmaceutical preparation comprising an effective amount of at least one complex, wherein said complex comprises:

(i) at least one compound of the formula:

$$R_a\text{-}HN\text{-}[\text{-}(CH_2)m_1\text{-}NR_b\text{-}]_{n-1}\text{-}(CH_2)m_2\text{-}NH\text{-}R_c \qquad I$$

wherein:

the R_a, R_b and R_c residues are, independently of each other, a hydrogen atom or a group of formula II:



~~with~~ wherein:

R_1 and R_2 are, independently of each other, C_6-C_{23} alkyl or alkenyl radicals, which are linear or branched, or radicals -C(=O)-(C_6-C_{23}) alkyl or -C(=O)-(C_6-C_{23}) alkenyl, which are linear or branched, aryl radicals, cycloalkyl radicals, fluoroalkyl radicals, polyethylene glycol groups, oxyethylene or oxymethylene groups, with the proviso that when one of the R_1 or R_2 is a polyethylene glycol group, an oxyethylene or an oxymethylene group, the other is a linear or branched C_6-C_{23} alkyl or alkenyl radical, a

linear or branched -C(=O)-(C_6-C_{23}) alkyl or -C(=O)-(C_6-C_{23}) alkenyl radical , an aryl radical, a cycloalkyl radical, or a fluoroalkyl radical,

p is a positive integer from 1 to 4,

n is a positive integer from 1 to 6,

m_1 and m_2 are a positive integer from 1 to 6, and ~~m1~~ m_1 may be different for each motif -(CH_2)m_1-NR_b, and wherein the total number of groups of formula II in said compound is between 1 and 4, wherein said compound is a cationic compound;

(ii) at least one active substance comprising at least one negative charge; and

(iii) at least one adjuvant which enhances the formation of the complex between said compound and said active substance;

in combination with a pharmaceutically acceptable carrier.

Claim 46 (Previously Added) The preparation of claim 45, comprising, in addition, at least one adjuvant which enhances the introduction of the active substance, comprised in said complex, into a cell.

Claim 47 (Currently Amended) The preparation of claim 46, wherein said adjuvant comprises chloroquine, a protic polar compound chosen from propylene glycol, polyethylene glycol, glycerol, ethanol, 1-methyl-L-2pyrrolidone or derivatives thereof, or

an aprotic polar compound chosen from dimethyl sulfoxide (DMSO), diethyl sulfoxide, di-n-propyl sulfoxide, dimethyl sulfone, sulfolane, ~~dimethyiformamide~~ dimethylformamide, dimethylacetamide, or tetramethylurea, acetonitrile.

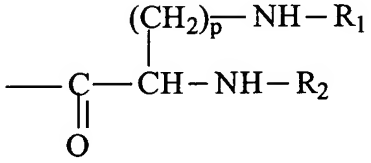
Claim 48 (Currently Amended) A method for ~~enhaneing expression of~~ expressing a gene in vivo wherein said method comprises the step of administering to a body a complex, wherein said complex comprises:

(i) at least one compound of the formula:

$$R_a\text{-}HN\text{-}[\text{-}(CH_2)m_1\text{-}NR_b\text{-}]_{n-1}\text{-}(CH_2)m_2\text{-}NH\text{-}R_c \quad I$$

wherein:

the R_a, R_b and R_c residues are, independently of each other, a hydrogen atom or a group of formula II:



~~with~~ wherein:

R_1 and R_2 are, independently of each other, C_6-C_{23} alkyl or alkenyl radicals, which are linear or branched, or radicals -C(=O)-(C_6-C_{23}) alkyl or -C(=O)-(C_6-C_{23}) alkenyl, which are linear or branched, aryl radicals, cycloalkyl radicals, fluoroalkyl radicals,

polyethylene glycol groups, oxyethylene or oxymethylene groups, with the proviso that when one of the R_1 or R_2 is a polyethylene glycol group, an oxyethylene or an oxymethylene group, the other is a linear or branched C_6-C_{23} alkyl or alkenyl radical, a linear or branched -C(=O)-(C_6-C_{23}) alkyl or -C(=O)-(C_6-C_{23}) alkenyl radical , an aryl radical, a cycloalkyl radical, or a fluoroalkyl radical,

p is a positive integer from 1 to 4,

n is a positive integer from 1 to 6,

m_l and m_2 are a positive integer from 1 to 6, and ~~m1~~ m_1 may be different for each motif -$(CH_2)m_1$-NR_b, and wherein the total number of groups of formula II in said compound is between 1 and 4, wherein said compound is a cationic compound;

(ii) at least one active substance comprising at least one negative charge; and

(iii) at least one adjuvant which enhances the formation of the complex between said compound and said active substance,

wherein said complex comprises a gene and wherein said gene is transferred into a cell and expressed by said cell.

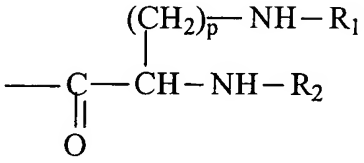
Claim 49 (Currently Amended) A method for ~~enhancing expression of~~ expressing a gene in vivo wherein said method comprises the step of administering to a body a complex, wherein said complex comprises:

(i) at least one compound of the formula:

$$R_a\text{-}HN\text{-}[\text{-}(CH_2)m_1\text{-}NR_b\text{-}]_{n-1}\text{-}(CH_2)m_2\text{-}NH\text{-}R_c \qquad I$$

wherein:

the R_a, R_b and R_c residues are, independently of each other, a hydrogen atom or a group of formula II:



~~with~~ wherein:

R_1 and R_2 are, independently of each other, C_6-C_{23} alkyl or alkenyl radicals, which are linear or branched, or radicals -C(=O)-(C_6-C_{23}) alkyl or -C(=O)-(C_6-C_{23}) alkenyl, which are linear or branched, aryl radicals, cycloalkyl radicals, fluoroalkyl radicals, polyethylene glycol groups, oxyethylene or oxymethylene groups, with the proviso that when one of the R_1 or R_2 is a polyethylene glycol group, an oxyethylene or an oxymethylene group, the other is a linear or branched C_6-C_{23} alkyl or alkenyl radical, a linear or branched -C(=O)-(C_6-C_{23}) alkyl or -C(=O)-(C_6-C_{23}) alkenyl radical , an aryl radical, a cycloalkyl radical, or a fluoroalkyl radical,

p is a positive integer from 1 to 4,

n is a positive integer from 1 to 6,

m_1 and m_2 are a positive integer from 1 to 6, and ~~m1~~ m_1 may be different for each motif $-(CH_2)m_1-NR_b$, and wherein the total number of groups of formula II in said compound is between 1 and 4, wherein said compound is a cationic compound;

(ii) at least one nucleic acid comprising a gene of interest and elements allowing for the expression of said gene of interest; and

(iii) at least one adjuvant which enhances the formation of the complex between said compound and said ~~active substance~~ nucleic acid,

wherein said gene is transferred into a cell and expressed by said cell.

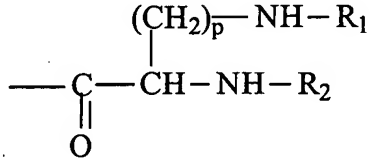
Claim 50 (Currently Amended) A method for ~~enhancing expression of~~ expressing a gene in vivo wherein said method comprises the step of administering to a body a complex, wherein said complex comprises:

(i) at least one compound of the formula:

$$R_a\text{-}HN\text{-}[\text{-}(CH_2)m_1\text{-}NR_b\text{-}]_{n-1}\text{-}(CH_2)m_2\text{-}NH\text{-}R_c \qquad \text{I}$$

wherein:

R_a and R_b are hydrogen atoms, R_c is a group of formula II:



~~with~~ wherein:

R_1 and R_2 are identical and are radicals -C(=O)-(C_6-C_{23}) alkyl or -C(=O)-(C_6-C_{23}) alkenyl, which are linear or branched,

p is 1,

n is 2,

m_1 is 4 and m_2 is 3, and wherein the total number of groups of formula II in said compound is between 1 and 4, wherein said compound is a cationic compound;

(ii) at least one nucleic acid comprising a gene of interest and elements allowing for the expression of said gene of interest; and

(iii) at least one adjuvant which enhances the formation of the complex between said compound and said ~~active substance~~ nucleic acid,

wherein said complex ~~comprising said~~ comprising said gene ~~and wherein said gene~~ is transferred into a cell and said gene is expressed by said cell.

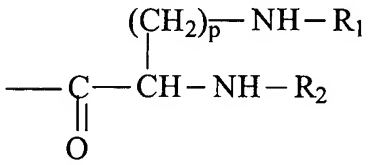
Claim 51 (Currently Amended) A method for ~~exhancing expression of~~ expressing a gene in vivo wherein said method comprises the step of administering to a body a complex, wherein said complex comprises:

(i) at least one compound of the formula:

$$R_a\text{-}HN\text{-}[\text{-}(CH_2)m_1\text{-}NR_b\text{-}]_{n-1}\text{-}(CH_2)m_2\text{-}NH\text{-}R_c \quad I$$

wherein:

R_a and R_b are hydrogen atoms and R_c is a group of formula II:



~~with~~ wherein:

R_1 and R_2 are identical and are chosen from stearoyl or oleoyl radicals,

p is 1,

n is 2,

m_1 is 4 and m_2 is 3, and wherein the total number of groups of formula II in said compound is between 1 and 4, wherein said compound is a cationic compound;

(ii) at least one nucleic acid comprising a gene of interest and elements allowing for the expression of said gene of interest; and

(iii) at least one adjuvant which enhances the formation of the complex between said compound and said ~~active substance~~ nucleic acid;

in combination with a pharmaceutically acceptable carrier,

wherein said complex ~~comprises a~~ comprising said gene ~~and wherein said gene~~ is transferred into a cell and said gene is expressed by said cell.

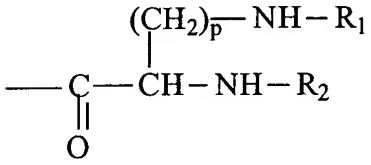
Claim 52 (Currently Amended) A method for ~~enhancing expression of~~ expressing a gene in vivo wherein said method comprises the step of administering to a body a complex, wherein said complex comprises:

(i) at least one compound of the formula:

$$R_a\text{-}HN\text{-}[\text{-}(CH_2)m_1\text{-}NR_b\text{-}]_{n-1}\text{-}(CH_2)m_2\text{-}NH\text{-}R_c \qquad I$$

wherein:

R_a and R_c are hydrogen atoms and ~~R_v~~ R_c is a group of the formula II:



~~with~~ wherein:

R_1 and R_2 are identical and are chosen from the radicals -C(=O)-(C_6-C_{23}) alkyl or -C(=O)-(C_6-C_{23}) alkenyl, which are linear or branched,

p is 1,

n is 2,

m_1 is 4 and m_2 is 3, and wherein the total number of groups of formula II in said compound is between 1 and 4, wherein said compound is a cationic compound;

(ii) at least one nucleic acid comprising a gene of interest and elements allowing for the expression of said gene of interest; and

(iii) at least one adjuvant which enhances the formation of the complex between said compound and said ~~active substance~~ nucleic acid;

in combination with a pharmaceutically acceptable carrier, wherein said complex ~~comprises~~ a comprising said gene ~~and wherein said gene~~ is transferred into a cell and said gene is expressed by said cell.

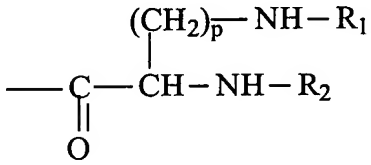
Claim 53 (Currently Amended) A method for ~~enhancing expression of~~ expressing a gene in vivo wherein said method comprises the step of administering to a body a complex, wherein said complex comprises:

(i) at least one compound of the formula:

$$R_a\text{-}HN\text{-}[\text{-}(CH_2)m_1\text{-}NR_b\text{-}]_{n-1}\text{-}(CH_2)m_2\text{-}NH\text{-}R_c \qquad I$$

wherein:

the R_a and R_c are each hydrogen atoms, and R_b is a group of formula II:



~~with~~ wherein:

R_1 and R_2 are identical and chosen from stearoyl or oleoyl radicals,

p is 1,

n is 2,

m_1 is 4 and m_2 is 3, and wherein the total number of groups of formula II in said compound is between 1 and 4, wherein said compound is a cationic compound;

(ii) at least one nucleic acid comprising a gene of interest and elements allowing for the expression of said gene of interest; and

(iii) at least one adjuvant which enhances the formation of the complex between said compound and said ~~active substance~~ nucleic acid;

in combination with a pharmaceutically acceptable carrier, wherein said complex ~~comprises a~~ comprising said gene ~~and wherein said gene~~ is transferred into a cell and said gene is expressed by said cell.

Claim 54 (Currently Amended) The method of claim 48, wherein said complex is administered by intramuscular injection, by inhalation, by intratracheal injection, by instillation, through the use of an aerosol, by ~~the~~ a topical route or by ~~the~~ an oral route.

Claim 55 (Currently Amended) The method of claim 49, wherein said complex is administered by intramuscular injection, by inhalation, by intratracheal injection, by instillation, through the use of an aerosol, by ~~the~~ a topical route or by ~~the~~ an oral route.

Claim 56 (Currently Amended) The method of claim 50, wherein said complex is administered by intramuscular injection, by inhalation, by intratracheal injection, by instillation, through the use of an aerosol, by ~~the~~ a topical route or by ~~the~~ an oral route.

Claim 57 (Currently Amended) The method of claim 51, wherein said complex is administered by intramuscular injection, by inhalation, by intratracheal injection, by instillation, through the use of an aerosol, by ~~the~~ a topical route or by ~~the~~ an oral route.

Claim 58 (Currently Amended) The method of claim 52, wherein said complex is administered by intramuscular injection, by inhalation, by intratracheal injection, by instillation, through the use of an aerosol, by ~~the~~ a topical route or by ~~the~~ an oral route.

Claim 59 (Currently Amended) The method of claim 53, wherein said complex is administered by intramuscular injection, by inhalation, by intratracheal injection, by instillation, through the use of an aerosol, by ~~the~~ a topical route or by ~~the~~ an oral route.